

Listing of the Claims:

1. (Previously Presented) A processor programmed to perform the steps of:
 - dividing a whole image that contains at least one region of flat content into a plurality of regions;
 - 5 generating a signature including generating signature bits from each of the plurality of regions including the at least one region of flat content;
 - embedding the signature without subdividing the signature by spreading the signature bits of the signature across at least a portion of the image which is larger than one of the regions, such that the signature bits from all regions
 - 10 can be extracted even if the at least one region of flat content has been replaced by tampering whereby the image is protected from tampering in the at least one region of flat content.
2. (Cancelled)
3. (Previously Presented) The processor according to claim 1 wherein the signature is embedded as a watermark.
4. (Previously Presented) The processor according to claim 3 wherein the watermark is a spread spectrum watermark.
5. (Previously Presented) The processor according to claim 3 wherein the watermark is embedded according to a trade-off between a payload size of the image, a robustness of the watermark, and a visibility of the watermark.
6. (Previously Presented) The processor according to claim 1 wherein each signature bit is embedded multiple times in different locations within the image.

7. (Previously Presented) The processor according to claim 1 wherein spreading the signature bits including:

decomposing the signature bits to multiple areas or a single large area within the image such that information needs to be extracted from the multiple areas or the single large area within the image, in order to evaluate the original signature bits.

8-10. (Cancelled)

11. (Previously Presented) An apparatus for embedding authentication signatures in images, the apparatus comprising:

an image divider which divides an image which has flat content areas into a plurality of blocks;

signature generator which generates a signature, each of the blocks contributing at least one bit of the signature including bits from the flat content areas;

signature embedder which embeds the signature across more than one of the blocks of the image without subdividing the signature leaving the flat areas unchanged.

12. (Previously Presented) A computer readable medium having a plurality of computer-executable instructions which instructs a processor to authenticate images, the computer executable instructions comprising:

a first program module which generates instructions for a computer for dividing the images into regions, at least one of the regions including an area of flat content;

a second program module which generates instructions for a computer for generating a signature, the signature being generated by generating at least one signature bit from each of the regions; and

a third program module which generates instructions for a computer for embedding the signature in the images without subdividing the signature, such

that the signature is spread across at least a portion of the image which is larger than one of the regions such that the area of flat content is protected from tampering.

13. (Previously Presented) The apparatus according to claim 11, further including one of a surveillance camera, a security camera, a digital image camera, a digital video camera, and a medical imaging system which generates the images.

14. (Previously Presented) A method of authenticating an audio video signal, the method comprising:

- receiving at least one video image with a processor;
- with the processor, dividing the image into a plurality of regions
- 5 including at least one region of flat content and a plurality of regions with non-flat content;
- with the processor, generating at least one bit of a signature from each of the regions including from the at least one region of flat content;
- with the processor, embedding the signature only in the plurality of
- 10 regions with the non-flat content; and
- subsequently with the same or a different processor, extracting the signature bits from the plurality of regions with the non-flat content and, from the extracted bits, determining if the at least one region of flat content has been subject to tampering.

15. (Previously Presented) One or more processors programmed to perform the method according to claim 14.